Reassignment of Balanus tintinnabulum maroccana Broch

DEA B. BEACH

In the process of revising the barnacle subgenus Megabalanus Hoek, 1913, specimens from the type lot of Balanus (Megabalanus) tintinnabulum maroccana Broch, 1927, were examined (Figs. 1a-i) and were found to possess characters inconsistent with those of the subgenus.

Megabalanus differs from other subgenera of the genus Balanus da Costa, 1778, by the possession of well developed radii permeated by pores parallel to the basis. Additionally B. tintinnabulum tintinnabulum Linnaeus, the type of the subgenus Megabalanus, and other subspecies in the B. tintinnabulum complex exhibit 1) radii whose summits are nearly horizontal, 2) a tergal spur that never exceeds one-fourth of the basal margin, 3) a spur furrow that is entirely or partially closed by the infolding of the carinal and scutal sides of the tergum resulting in the elevation of the spur above the inner surface of the valve, and 4) distinct secondary denticulae on both sides of the radial sutural edge.

The radii of *B. maroccana* are not permeated by pores (Fig. 1*i*), and possess oblique summits (Fig. 1*e*). Secondary denticulation is not well developed (Fig. 1*i*). In the description of *B. maroccana*, Broch (1927, p. 21) indicates that the spur is "one third to one half of the greatest diameter of the plate" and that "the spur fasciole is broad and shallow, and never closed..." (Figs. 1a-b).

The open spur furrow, the breadth of the tergal spur, the prominence of the adductor ridge, the width of the radii, and the coloration of the shell suggest relationship to the *B. amphitrite* complex. However, it does not appear that *B. maroccana* can be readily identified with any other known member of this complex. It is therefore retained as a distinct species, and is transferred to the subgenus *Balanus*.

LITERATURE CITED

Broch, H. 1927. Studies on Moroccan Cirripeds (Atlantic Coast). Bull. Soc. Sci. Nat. Maroc, vol. 7, pp. 11-38, pls. 1-4, text-figs. 1-10.

Department of Invertebrate Zoology, California Academy of

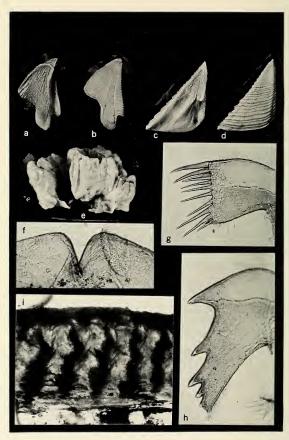


Fig. 1. Shell, opercular valves, and mouth parts of a specimen from the type lot of Balanus maroccana Broch: a, interior of tergum; b, exterior of tergum; c, interior of scutum; d, exterior of scutum; e, external view of shells; f, labrum; g, maxilla I; h, mandible; i, thin section of sutural edge of radius; a-d, \times 7.5; e, \times 2; f-i, \times 100.

Sciences, San Francisco, California 94119. Present address: Program in Environmental Sciences, University of North Carolina at Wilmington, Wilmington, North Carolina 28401.

Quart. Jour. Florida Acad. Sci. 35(1) 1972